

**REMARKS**

An excess claim fee payment letter is submitted herewith for one (1) additional independent claim.

Claims 1-20 are all the claims presently pending in the application. The specification and claims 1, 3, and 7 are amended to more clearly define the invention and claims 11-20 are added. Claims 1, 7, 11, and 17 are independent.

These amendments are made only to more particularly point out the invention for the Examiner and not for narrowing the scope of the claims or for any reason related to a statutory requirement for patentability.

Applicant also notes that, notwithstanding any claim amendments herein or later during prosecution, Applicant's intent is to encompass equivalents of all claim elements.

Applicant gratefully acknowledges the Examiner's indication that claims 7-9 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and to overcome the rejections under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph. In this regard, this Amendment rewrites claim 7 into independent form including all of the limitations of the base claim and any intervening claims and to overcome the rejections under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph to place claims 7-9 into condition for immediate allowance. However, Applicant respectfully submits that all of the claims are allowable.

Claims 1-6 and 10 stand rejected under 35 U.S.C. § 102(a) as being anticipated by and/or under 35 U.S.C. § 103(a) as being unpatentable over the Hamano et al. reference.

This rejection is respectfully traversed in the following discussion.

## **I. THE CLAIMED INVENTION**

A first exemplary embodiment of the claimed invention, as defined by, for example, independent claim 1, is directed to a damper valve that includes a hollow casing, a valve sleeve, a spool, a spring, a supply passage, a one-way valve, a reflex passage and a valve member. The hollow casing includes a first port connected to a hydraulic pump side and a second port connected to a hydraulic actuator side. The valve sleeve divides the casing into a first chamber communicating with the first port and a second chamber communicating with the second port and includes a plurality of communicating passages communicating with the first chamber and the second chamber. The spool is axially moveable with respect to the valve sleeve in the first chamber. The spring urges the spool toward the second chamber. The supply port supplies hydraulic oil to the first chamber through the first port to the second chamber through the spool and the valve sleeve. The one-way valve is provided in the supply port and allows the hydraulic oil to flow from the first port to the second port and inhibits the hydraulic oil from flowing from the second port to the first port. The reflux passage leads the hydraulic oil from the second chamber to the first chamber through the communicating passages. The valve member defines a gap between an outer circumference of the valve member and the valve sleeve. The valve member also covers the openings of the plurality of communicating passages which face the first chamber. The valve member is elastically deformed by a low flow rate of the hydraulic oil flowing from the second chamber to the first chamber and when a flow rate of the hydraulic oil flowing from the second chamber to the first chamber exceeds a predetermined value, the valve member is moved with the spool against the urging force of the spring to widely open the openings of the communicating passages.

A second exemplary embodiment of the claimed invention, as defined by, for example, independent claim 17, is directed to damper valve that includes a casing, a spool, a spring, a one-way valve, and a valve. The casing includes a first port, a second port, and a valve sleeve dividing the casing into a first chamber communicating with the first port and a second chamber communicating with the second port. The valve sleeve defines a plurality of passages communicating with the first chamber and the second chamber, and an annular groove communicating with an opening in each of the plurality of passages. The spool is in the first chamber and is axially moveable with respect to the valve sleeve. The spring biases the spool towards the second chamber. The one-way valve allows flow from the first port to the second port and inhibits flow from the second port to the first port. The valve has an outer circumference contacting the valve sleeve adjacent to the annular groove.

Conventional damper valves include valve members that get stuck to the valve sleeve which causes the driver to feel a certain load until the valve member separates from the valve sleeve. This sudden separation causes an on/off feeling to be felt by the driver which causes a bad influence upon the steering feeling. (Page 4, line 16 - page 5, line13).

In stark contrast, the first exemplary embodiment of the present invention includes a gap that is formed between the valve member and the valve sleeve. In this manner, the valve member does not get stuck to the valve sleeve and, therefore, the above-described problems are obviated. (Page 19, line 4 - page 20, line 22).

The second exemplary embodiment of the present invention provides the valve sleeve with an annular groove which increases the surface area upon which the returning hydraulic oil acts on the valve member is increased which, in turn, decreases the ability of the valve member to become stuck on the valve sleeve. (Page 24, line 13 - page 25, line 5).

## **II. THE 35 U.S.C. § 112, SECOND PARAGRAPH REJECTIONS**

The Examiner alleges that claims 1-10 are indefinite. While Applicant submits that such would be clear to one of ordinary skill in the art to allow them to know the metes and bounds of the invention, taking the present Application as a whole, to speed prosecution claims 1 and 3 have been amended in accordance with Examiner Hepperle's very helpful suggestions.

In view of the foregoing, the Examiner is respectfully requested to withdraw this rejection.

## **III. THE PRIOR ART REJECTIONS**

Regarding the rejections of claims 1-6 and 10, the Examiner alleges that the Hamano et al. reference teaches and/or renders the claimed invention obvious. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by the Hamano et al. reference.

The Hamano et al. reference does not teach or suggest the features of the claimed invention including at least: 1) a valve member that defines a gap between an outer circumference of the valve member and the valve sleeve (claims 1, and 11); and 2) a valve sleeve that defines an annular groove communicating with an opening in each of the plurality of passages where the valve has an outer circumference contacting the valve sleeve adjacent to the annular groove (claims 7 and 17).

As explained above, these features are important for reducing and/or eliminating the likelihood that the valve will get stuck against the valve sleeve and, therefore, will improve

the steering feeling.

In stark contrast, and as Examiner Hepperle pointed out, the Hamano et al. reference appears to disclose a damper valve which is substantially the same as that discussed in the background section of the present invention and which, therefore, suffers from exactly the same problems that are solved by the present invention.

The damper valve that is disclosed by the Hamano et al. reference suffers from these problems because it does not teach or suggest a valve member that defines a gap between an outer circumference of the valve member and the valve sleeve or a valve sleeve that defines an annular groove communicating with an opening in each of the plurality of passages where the valve has an outer circumference contacting the valve sleeve adjacent to the annular groove as recited by the independent claims.

Clearly, the Hamano et al. reference does not teach or suggest a valve member that defines a gap between an outer circumference of the valve member and the valve sleeve.

Rather, the Hamano et al. reference discloses a valve member 65 which directly contacts the valve sleeve 52 at an outer circumference of the valve member. Therefore, the valve member 65 may get stuck against the valve sleeve 52, which, as explained above, causes the driver to feel a certain load until the valve member separates from the valve sleeve. This sudden separation causes an on/off feeling to be felt by the driver which causes a bad influence upon the steering feeling.

Further, while the valve sleeve 52 that is disclosed by the Hamano et al. reference appears to include a passage 56, the valve sleeve 52 clearly does not include an annular groove communicating with an opening in each of the plurality of passages, let alone a valve that has an outer circumference contacting the valve sleeve adjacent to the annular groove.

Indeed, the Examiner does not allege that the Hamano et al. reference teaches or suggests these features

Therefore, the Hamano et al. reference does not teach or suggest each and every element of the claimed invention and the Examiner is respectfully requested to withdraw this rejections of claims 1-6 and 10.

#### **IV. FORMAL MATTERS AND CONCLUSION**

The Office Action objects to the drawings. This Amendment encloses a replacement drawing sheet which corrects Figure 14 to include the legend "Prior Art." Applicant respectfully requests withdrawal of this objection.

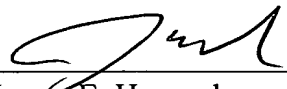
In view of the foregoing amendments and remarks, Applicant respectfully submits that claims 1-20, all the claims presently pending in the Application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the Application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 9/23/08

  
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**AMENDMENTS TO THE DRAWINGS**

This Amendment encloses a replacement drawing sheet which corrects Figure 14 to include the legend "Prior Art." Applicant respectfully requests withdrawal of this objection.

Attachments:

Annotated Sheet Showing Changes

Replacement Sheet



11/11

FIG. 14 PRIOR ART

